

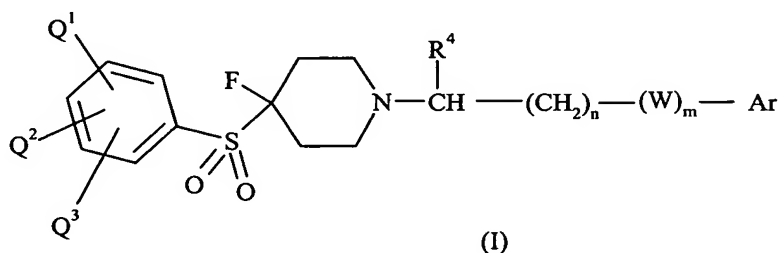
## AMENDMENTS TO THE CLAIMS

Please cancel Claims 1-9 without prejudice and insert therefore new Claims 10-19. This listing of claims will replace all prior versions, and listings, of claims in the application.

### Listing of Claims:

Claims 1-9 (canceled)

10. (new) A compound of the formula I:



wherein:

Ar is phenyl, benzisothiazol-3-yl or benzthiophen-3-yl, each of which bears substituent groups  $R^1$ ,  $R^2$  and  $R^3$ ;

$R^1$  is hydrogen, fluorine, chlorine, bromine,  $C_{1-6}$  alkyl,  $C_{3-6}$  cycloalkyl,  $C_{2-6}$  alkenyl,  $C_{2-6}$  alkynyl,  $C_{1-6}$  alkoxy,  $C_{2-6}$  alkenyloxy,  $C_{2-6}$  alkynyloxy, or  $C_{1-6}$  alkyl substituted with 1-5 fluorine atoms;

$R^2$  is hydrogen, fluorine, chlorine,  $C_{1-4}$  alkyl,  $C_{1-4}$  alkoxy,  $C_{1-4}$  alkyl substituted with 1-5 fluorine atoms or  $C_{1-4}$  alkoxy substituted with 1-5 fluorine atoms;

$R^3$  is hydrogen, fluorine, chlorine, methyl, methoxy, trifluoromethyl, difluoromethyl, trifluoromethoxy or difluoromethoxy;

$Q^1$  is hydrogen; fluorine; chlorine; bromine;  $C_{1-6}$  alkyl;  $C_{3-6}$  cycloalkyl;  $C_{2-6}$  alkenyl;  $C_{2-6}$  alkynyl;  $C_{1-6}$  alkoxy;  $C_{2-6}$  alkenyloxy;  $C_{2-6}$  alkynyloxy;  $C_{1-6}$  alkyl substituted with 1-5 fluorine atoms; nitrile;  $COQ^4$  or  $CO_2Q^4$  where  $Q^4$  is hydrogen or  $C_{1-6}$  alkyl;  $NQ^5Q^6$ ,  $CONQ^5Q^6$  or  $SO_2NQ^5Q^6$  where  $Q^5$  is hydrogen or  $C_{1-6}$  alkyl and  $Q^6$

is hydrogen or C<sub>1-6</sub> alkyl or Q<sup>5</sup> and Q<sup>6</sup> are joined to form either a 4-7 membered heterocyclic ring which may also contain one oxygen or one further nitrogen ring atom, which heterocyclic ring may optionally be substituted by up to 3 fluorine atoms or by CF<sub>3</sub>, methyl, ethyl or hydroxyl; hydroxyl; nitro; SOQ<sup>7</sup> or SO<sub>2</sub>Q<sup>7</sup> where Q<sup>7</sup> is C<sub>1-4</sub> alkyl; NQ<sup>8</sup>COQ<sup>9</sup>, NQ<sup>8</sup>CO<sub>2</sub>Q<sup>9</sup> or NQ<sup>8</sup>SO<sub>2</sub>Q<sup>9</sup> where Q<sup>8</sup> is hydrogen or C<sub>1-4</sub>alkyl and Q<sup>9</sup> is hydrogen or C<sub>1-4</sub>alkyl or is joined to Q<sup>8</sup> to form a 5-7 membered ring; a heteroaromatic ring of 5 ring atoms 1, 2, 3 or 4 of which may be nitrogen atoms or 1 or 2 of which are nitrogen atoms and 1 of which is an oxygen or sulfur atom or 1 of which is an oxygen or sulfur atom, which heteroaromatic ring optionally being substituted by methyl, ethyl or hydroxyl; or a heteroaromatic ring of 6 ring atoms containing 1 or 2 nitrogen ring atoms or a phenyl group either of which is optionally substituted by 1 or 2 fluorine or chlorine atoms or C<sub>1-4</sub>alkyl, C<sub>1-4</sub>alkoxy or trifluoromethyl groups;

Q<sup>2</sup> is hydrogen, fluorine, chlorine, nitrile, hydroxy, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, C<sub>1-4</sub> alkyl substituted with 1-5 fluorine atoms, or C<sub>1-4</sub> alkoxy substituted with 1-5 fluorine atoms;

Q<sup>3</sup> is hydrogen, fluorine, chlorine, methyl, methoxy, trifluoromethyl, difluoromethyl, trifluoromethoxy or difluoromethoxy;

or Q<sup>2</sup> and Q<sup>3</sup> are joined to form the residue of a 5, 6 or 7 membered carbocyclic ring;

R<sup>4</sup> is H or C<sub>1-4</sub> alkyl,

m is 0 or 1;

n is 0, 1 or 2; and

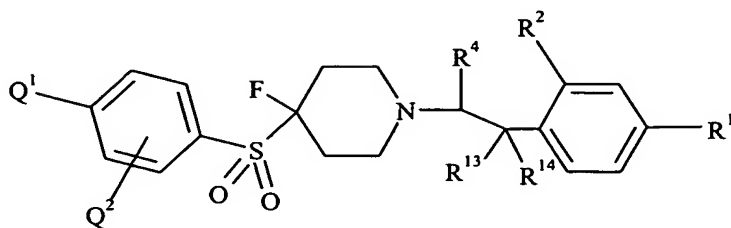
W is -CH<sub>2</sub>-, -CHF-, -CH(OH)- or -CO-;

or a pharmaceutically acceptable salt thereof.

11. (new) The compound of Claim 10 wherein Ar represents benzisothiazol-3-yl or benzthiophen-3-yl, each bearing substituent groups R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup>, m is 0 and n is 0.

12. (new) The compound of Claim 10 wherein Ar represents phenyl bearing substituent groups R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup>, m is 1 and n is 0.

13. (new) The compound of Claim 10 of the formula IIA:



(IIA)

or a pharmaceutically acceptable salt thereof;

wherein  $R^{13}$  represents H; and  $R^{14}$  represents H, F or OH; or  $R^{13}$  and  $R^{14}$  together represent keto.

14. (new) The compound of Claim 10 wherein  $Q^1$  is selected from H, F, Cl, Br, CN, carboxamide, 5-membered heteroaryl and  $NQ^5Q^6$  where  $Q^5$  and  $Q^6$  complete a heterocyclic ring;

$Q^2$  is H, F or Cl;

$Q^3$  is H or F;

$R^1$  is H, F, methyl or  $CF_3$ ;

$R^2$  is H, F, methyl or  $CF_3$ ; and

$R^3$  is H.

15. (new) A compound which is selected from the group consisting of:

- 4-(4-Bromophenylsulfonyl)-1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoropiperidine;
- 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-(4-fluorophenylsulfonyl)piperidine;
- 4-({1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoropiperidin-4-yl} sulfonyl)benzonitrile;
- 4-({1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoropiperidin-4-yl} sulfonyl)benzamide;
- 4-({4-Fluoro-1-[2-(2-fluorophenyl)ethyl]piperidin-4-yl} sulfonyl)benzamide;
- 4-Fluoro-4-(4-fluorophenylsulfonyl)-1-[2-(4-fluorophenyl)ethyl]piperidine;
- 4-Fluoro-4-(4-fluorophenylsulfonyl)-1-[2-(2-fluorophenyl)ethyl]piperidine;
- 4-Fluoro-4-(4-fluorophenylsulfonyl)-1-(2-phenylethyl)piperidine;
- 4-({4-Fluoro-1-[2-(4-fluorophenyl)ethyl]piperidin-4-yl} sulfonyl)benzonitrile;
- 4-({4-Fluoro-1-[2-(2-fluorophenyl)ethyl]piperidin-4-yl} sulfonyl)benzonitrile;
- 4-{{4-Fluoro-1-(2-phenylethyl)piperidin-4-yl} sulfonyl} benzonitrile;

4-({4-Fluoro-1-[2-(4-fluorophenyl)ethyl]piperidin-4-yl}sulfonyl)benzamide;  
 4-{{4-Fluoro-1-(2-phenylethyl)piperidin-4-yl}sulfonyl}benzamide;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-(phenylsulfonyl)piperidine;  
 4-Fluoro-1-(2-(2-fluorophenyl)ethyl)-4-(phenylsulfonyl)piperidine;  
 4-Fluoro-1-(2-(4-fluorophenyl)ethyl)-4-(phenylsulfonyl)piperidine;  
 4-Fluoro-1-(2-phenylethyl)-4-(phenylsulfonyl)piperidine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-(2-fluorophenylsulfonyl)piperidine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-(3-fluorophenylsulfonyl)piperidine;  
 4-(4-Chlorophenylsulfonyl)-1-[2-(2,4-difluorophenyl)ethyl]-4-fluoropiperidine;  
 4-({4-Fluoro-1-[(6-fluoro-1,2-benzisothiazol-3-yl)methyl]piperidin-4-yl}sulfonyl)benzonitrile;  
 6-Fluoro-3-({4-fluoro-4-[(4-fluorophenyl)sulfonyl]piperidin-1-yl}methyl)-1,2-benzisothiazole;  
 4-[4-({1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoropiperidin-4-yl}sulfonyl)phenyl]morpholine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-[4-(pyrrolidin-1-yl)phenylsulfonyl]piperidine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-[4-(piperidin-1-yl)phenylsulfonyl]piperidine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-{4-[4-(trifluoromethyl)piperidin-1-yl]phenylsulfonyl}-  
 iperidine;  
 4-[4-(Azetidin-1-yl)phenylsulfonyl]-1-[2-(2,4-difluorophenyl)ethyl]-4-fluoropiperidine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-[4-(4,4-difluoropiperidin-1-yl)phenylsulfonyl]-4-  
 fluoropiperidine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-[4-([1,2,3]triazol-1-yl)phenylsulfonyl]piperidine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-[4-(pyrrol-1-yl)phenylsulfonyl]piperidine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-[4-(pyrazol-1-yl)phenylsulfonyl]piperidine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-{[3-fluoro-4-(pyrazol-1-yl)phenyl]sulfonyl}piperidine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-{[3-fluoro-4-(imidazol-1-yl)phenyl]sulfonyl}piperidine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-{[3-fluoro-4-(1,2,3-triazol-1-yl)phenyl]sulfonyl}-  
 iperidine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-{[3-fluoro-4-(1,2,4-triazol-1-yl)phenyl]sulfonyl}-  
 iperidine;  
 1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-[4-(1,3-oxazol-2-yl)phenylsulfonyl]piperidine;

1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-[4-(1-methylpyrazol-5-yl)phenylsulfonyl]piperidine;  
1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-[4-(1-methylimidazol-2-yl)phenylsulfonyl]piperidine;  
1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-[4-(2-methyltetrazol-5-yl)phenylsulfonyl]piperidine;  
1-[2-(2,4-Difluorophenyl)ethyl]-4-fluoro-4-[4-(1,3-thiazol-2-yl)phenylsulfonyl]piperidine;  
4-[(2-Bromo-4-fluorophenyl)sulfonyl]-1-[2-(2,4-difluorophenyl)ethyl]-4-fluoropiperidine;  
(*RS*)-1-[2-(2,4-Difluorophenyl)-2-fluoroethyl]-4-fluoro-4-(phenylsulfonyl)piperidine;  
2-[4-Fluoro-4-(4-fluorophenylsulfonyl)piperidin-1-yl]-1-(4-fluorophenyl)ethanone;  
(*RS*)-4-Fluoro-1-[2-fluoro-2-(4-fluorophenyl)ethyl]-4-(4-fluorophenylsulfonyl)piperidine;  
4-({4-Fluoro-1-[2-(4-fluorophenyl)-2-oxoethyl]piperidin-4-yl} sulfonyl)benzonitrile;  
1-(4-Fluorophenyl)-2-[4-fluoro-4-(phenylsulfonyl)piperidin-1-yl]ethanone;  
(*RS*)-4-({1-[2-(2,4-Difluorophenyl)-2-fluoroethyl]-4-fluoropiperidin-4-yl} sulfonyl)benzamide;  
(*RS*)-4-({4-Fluoro-1-[2-fluoro-2-(4-fluorophenyl)ethyl]piperidin-4-yl} sulfonyl)benzamide;  
(*RS*)-1-[2-(2,4-Difluorophenyl)-1-methylethyl]-4-fluoro-4-(4-fluorophenylsulfonyl)-  
piperidine;  
or a pharmaceutically acceptable salt thereof

16. (new) A pharmaceutical composition comprising the compound of Claim 10 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier.

17. (new) A method of treatment of a subject suffering from or prone to a condition mediated by 5-HT<sub>2A</sub> receptor activity which comprises administering to that subject an effective amount of the compound of Claim 10 or a pharmaceutically acceptable salt thereof.

18. (new) A method for the treatment of a sleep disorder in a human patient in need thereof which comprises administering to the patient an effective amount of the compound of Claim 10 or a pharmaceutically acceptable salt thereof.

19. (new) A method for the treatment of schizophrenia in a human patient in need thereof which comprises administering to the patient an effective amount of the compound of Claim 10 or a pharmaceutically acceptable salt thereof.